

IN THE CLAIMS

1. (Currently Amended) A honeycomb structural body comprising:
a plurality of cells having through-holes formed by providing partition walls
composed mainly of cordierite, which has the chemical composition SiO_2 : 45-55 wt%,
 Al_2O_3 : 33-42 wt%, MgO : 12-18 wt%, in a honeycomb fashion,
the honeycomb structural body having a cell density of at least 600
cells/in², a pore volume of said partition walls being at least 30%, an average roughness
Rz of the surface of said partition walls being 1-5 μm , and said honeycomb structural
body being a catalyst carrier having a catalyst loaded on the surface of said partition
walls.

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2. (Canceled).

3. (Previously Amended) A honeycomb structural body according to claim 1,
wherein a thickness of said partition walls being no greater than 80 μm .

4. (Canceled).

5. (Previously Amended) A honeycomb structural body according to claim 1,
wherein a mean size of fine pores formed inside said partition walls being 1-10 μm .

6. (Canceled).

7. (Currently Added) A honeycomb structural body comprising:

a plurality of cells having through-holes formed by providing partition walls composed mainly of cordierite, which has the chemical composition SiO_2 : 45-55 wt%, Al_2O_3 : 33-42 wt%, MgO : 12-18 wt%, in a honeycomb fashion,

the honeycomb structural body having a cell density of at least 600 cells/in², a pore volume of said partition walls being at least 35%-80%, ~~an average roughness R_z of the surface of said partition walls being 95-80%~~, an average roughness R_z of the surface of said partition walls being 1-5 μm , and said honeycomb structural body being a catalyst carrier having a catalyst loaded on the surface of said partition walls.

8. (Previously Added) A honeycomb structural body according to claim 7, characterized in that the thickness of said partition walls is no greater than 80 μm .

9. (Previously Added) A honeycomb structural body according to claim 7, characterized in that the mean size of the fine pores formed inside said partition walls is 1-10 μm .

10. (Currently Amended) A honeycomb structural body according to claim 1, ~~characterized in that~~ said honeycomb structural body being arranged for insertion ~~is used as a catalyst carrier in an exhaust gas purification apparatus of for an internal combustion engine.~~

11. (Currently Amended) A honeycomb structural body according to claim 7,
characterized in that said honeycomb structural body being arranged for insertion is
~~used as a catalyst carrier in an exhaust gas purification apparatus of~~ for an internal
combustion engine.